DIVISION 1 GENERAL REQUIREMENTS

SECTION 01000 - GENERAL

A. CONTRACT DOCUMENTS

- The Contractor is referred to: the "Specifications"; the "Instructions to Bidders and General Conditions", the "Form of Proposal"; the "Amendments to General Conditions" and all amendments and addenda, all of which govern the work of this Contract.
- 2. Work not particularly specified in the Specifications but involved in carrying out their intent or in the complete and proper execution of the work, is required, and shall be performed by the Contractor.
- 3. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to be used and interpretation of these Specifications shall be made upon that basis.
- 4. Should any conflict occur in the Specifications, the Contractor shall be deemed to have estimated on the most expensive way of doing the work unless he has asked for or obtained a decision in writing from Bucchianeri Management Services, LLC herein referred to and acting as the Owner's Representative/Clerk of the Works before the submission of his bid as to what shall govern.
- 5. Each Contractor shall be responsible for the work indicated in the specifications and contract, and shall be responsible for the coordination of the work stated in the specifications with all other trades.

B. GENERAL PROVISIONS

- The Contractor's Base Bid, as accepted by the City, includes the total cost to the City
 for all work required by the Contract Documents. The Contractor shall verify all field
 conditions involved, as there will be no adjustments of contract price due to field
 measurements and conditions differing from the specifications, and/or the intent of the
 specifications.
- 2. The Contractor shall verify dimensions and conditions on the job so that all work will properly join new or existing work. Before commencing work, examine existing work and conditions on which new work is in any way dependent for accurate and correct workmanship acceptable according to the intent of these Specifications and report to the Bucchianeri Management Services, LLC herein referred to and acting as the Owner's Representative/Clerk of the Works any conditions which will prevent proper performance of work.
- 3. Each Contractor must commence work within seven (7) days after the date specified in a written notice from the Program Manager and continue on a full-time

- work program. The work shall be fully complete in the time set forth in the Amendments to the General Conditions.
- 4. Each Contractor shall be prepared to coordinate work so as to minimize disruption to the development.
- 5. All work shall be done in a neat and clean manner by experienced and capable mechanics. Workmanship required in the execution of the work herein specified shall be of good quality and shall be subject to the approval of the Clerk of the Works.
- 6. Each Contractor shall provide and pay for all materials, labor, tools, equipment, transportation and other facilities unless otherwise stipulated, for the execution of this Contract.
- 7. Each Contractor shall supervise and be responsible for proper location and installation of all items.
- 8. The work will be inspected by the Bucchianeri Management Services, LLC herein referred to and acting as the Owner's Representative/Clerk of the Works. Work that is performed improperly, poorly made construction, and changes from specified material, will be rejected and satisfactory corrections shall be made at the Contractor's expense.
- 9. Each Contractor shall determine from his/her examination of the premises, the exact extent of the work of each section.
- 10. Contractor's Superintendent
 - i. The Contractor shall devote his time and personal attention to the work, and shall employ and retain at the building site, from commencement to the entire completion of the work, a Contractor's Superintendent competent and capable of maintaining proper supervision and care of the work and acceptable to the City and Clerk of the Works, who in the absence of the Contractor, and irrespective of any superintendent or foreman employed by any sub-contractor, shall see that the directives of the City and Clerk of the Works are carried out.
 - ii. The Contractor's Superintendent on the job shall not be changed or removed without written consent of the City and Clerk of the Works.
- 11. Authorization for additional or deleted work shall be by change order only.
- 12. General Contractor shall be responsible for furnishing a general construction laborer, on 48 hours notice, for purposes of performing non-contract item work to be assigned at the discretion of the City or Clerk of the Works. This will be a reimbursable expense for which the City will reimburse the contractor all expenses incurred (wages, benefits, insurance etc.) plus 15% for overhead and profit.

SECTION 01010 - SUMMARY OF WORK

A. The work shall consist of furnishing all labor, materials, services, equipment and all

- other incidental items necessary and required to complete the work, in accordance with the Contract Documents.
- B. Unless otherwise noted, the scope of work for all items shall apply to the construction of all modifications to the Building as indicated in the Specifications.
- C. Without restricting the generality of the foregoing, the following items shall be performed, furnished and installed as specified and as follows:
 - 1. Obtain all permits, certificates and signoffs from all Governmental agencies having jurisdiction, and pay all costs and expenses thereof. Obtain all certificates of completion, and/or new or amended certificates of occupancy. Submittal of all certificates and reports shall constitute the basis for final payment.
 - 2. Perform all work as indicated in the Contract Documents to provide a fully operable and functioning building modification as defined by the Contract Documents and any and all agreed modifications to said documents.
- D. Provide all other labor and materials as may be reasonably referred to be required to complete the Contract.
- E. Obtain all permits, certificates and signoffs from all Governmental agencies having jurisdiction and paying all cost and expenses thereof. This includes obtaining certificates of completion and /or new or amended certificates of occupancy. Submittals of all certificates and reports shall constitute the basis for final payment.
- F. Bucchianeri Management Services, LLC herein referred to and acting as the Owner's Representative/Clerk of the Works shall perform inspections on a periodic basis.

SECTION 01040 - PROJECT PROCEDURES AND COORDINATION

A. The work of this Contract shall be under the direction and supervision the Owner's Representative, Clerk of the Works and City. The Contractor shall notify in writing the Owner's representative and the Clerk of the Works of the date the work shall begin. Such notification to be received by both parties at least five (5) business days prior to commencement of work. Address all correspondence to:

Marlborough Community Development Authority Office of Community Development 255 Main Street, Suite 209 Marlborough, MA 01752

Bucchianeri Management Services, LLC 5 Crystal Hill Circle. Atkinson, NH 03811

B. Bidders are cautioned to read carefully the Specifications for the work included in this Contract. Bidders are responsible for ascertaining that the Specifications have the correct number of pages. The prospective bidder must visit the site to ascertain the full nature and extent of work required. A pre-bid site viewing will be arranged and scheduled into the bidding process.

C. The work is located at:

223 Mechanic Street, Marlborough, MA

D. NOT USED

- E. After award of the contract, the General Construction Contractor shall be furnished with four (4) complete sets of Specifications.
- F. Additional copies of Specifications may be obtained upon request. If surplus documents are not available in stock, the Contractor shall pay the printing cost of additional requests.
- G. Each Contractor shall be responsible to notify the Superintendent on his arrival at the Project with his field force and/or equipment prepared to perform the work, and every day thereafter that he intends to perform work until this Contract is completed. Any work done without previous notification to the Superintendent may be rejected.
- H. Upon arrival at the project all contractors shall sign the Contractor Log and inform the Project Superintendent as to the scope of work planned for the day. Before leaving the project grounds, the Contractor shall advise the Project Superintendent of any conditions, which might adversely affect the progress, schedule or condition of the project.

I. CONTRACTOR USE OF THE PREMISES

1. During the construction period the Contractor shall have full use of the building and premises for construction operations. The Contractor's use of the premises is limited only by project phasing, egress, City's right to perform work, or to retain other contractors on portions of the Project.

SECTION 01042 - PROTECTION OF SITE

- A. The Contractor shall carefully protect and minimize damage to the existing areas surrounding the work sites.
- B. Section not used
- C. The Contractor shall be responsible to protect all areas of the building that are part of this contract and all areas that are used as direct access for materials, methods, equipment and the like for the duration of this contract. A photographic record of existing conditions of the building is maintained and will be used as the judging criteria for any and all damage found at the supposed completion of the project. The Clerk of the Works and City Representative shall walk the building, determine and record all conditions of the building. If damage due to this contract is found, it shall be documented and repaired back to its original state and quality, by the General Contractor or their designated Sub contractor, at no additional cost to the City.
- D. The Contractor shall adequately enclose and protect areas against the weather, dust, services etc., where the installation is incomplete at the end of the working day, and shall be responsible for any damage or inconvenience due to his failure to do so. Such protection shall be done to the complete satisfaction of the City's Representative or

Clerk of the Works.

E. SECTION 01045 – CUTTING AND PATCHING

A. CUTTING (ALL CONTRACTORS)

- 1. Each Contractor shall be responsible for all cutting of walls, floors, ceilings, etc., necessary for installation of this work. No cutting of beams, bearing walls or other structural parts shall be done without Clerk of the Works approval. Each Contractor is responsible to coordinate this work with the General Contractor.
- 2. Each Contractor shall do all cutting necessary whether it is masonry cutting or steel cutting (burning) to free all items to be removed with minimal damage to adjacent finishes. If removals expose poorly finished surfaces or surfaces structurally deficient for attaching new equipment or items, the exposed surface shall be structurally reinforced or refinished by the General Contractor in an approved manner at no additional cost to the City.
- 3. Drilling for expansion bolts, hangers and supports shall be done by each Contractor subject to the conditions stated in this Section.
- 4. Cut using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with original installer and comply with original installer's recommendations.

B. PATCHING (GENERAL CONTRACTOR)

- The General Contractor shall be responsible to patch and finish all walls, floors, ceilings and all other surfaces to match the surrounding surfaces in all areas affected by the work of this Contract. Patching shall be done in a neat and careful manner, leaving the finished work free from cracks, stains and defects in a condition acceptable to the Clerk of the Works. Patching shall be done in all areas affected by the work of this contract.
- 2. The General Contractor shall patch, repair and restore to their undamaged condition, all surfaces, materials and equipment damaged by Contractor's forces or suppliers. Completed repairs shall match existing adjacent surfaces and shall include painting where necessary.

Where patching occurs in a smooth painted surface, extend final paint coat over entire unbroken surface, restoring surface to a uniform color and sheen.

SECTION 01060 - REGULATORY REQUIREMENTS

A. GENERAL

- 1. All work shall be done as hereinafter specified and in accordance with the latest rules and regulations of all regulatory and public agencies having jurisdiction in the work of this Contract.
- 2. All work and materials shall fulfill the requirements of the Commonwealth of Massachusetts Building Code and shall meet the approval of the Clerk of the

Works and City.

- 3. Electrical work shall be done under the supervision of an electrician licensed in the Commonwealth of Massachusetts.
- 4. Plumbing work shall be performed under the supervision of a plumber licensed in the Commonwealth of Massachusetts.
- 5. The Specifications of the American Society for Testing and Materials (ASTM), latest edition, shall apply to any and all for which the ASTM Standard has been established, unless otherwise specified. Each manufacturer or supplier of each material shall certify that their material conforms to the applicable ASTM Specification.
- 6. Contractor shall obtain all work permits and necessary certificates as required according to the final Contract Drawings and Amendments as approved by the Building Department.
- 7. Contractor shall be responsible (at no additional cost to the City) for the filing of all required applications, reports and forms with all Governmental Agencies having jurisdiction and shall obtain all required work permits and approvals. Copies of all approvals shall be submitted to the City.
- 8. If in the event that the Contractor is prevented from obtaining any required certificates of completed inspection or amended certificates of occupancy due to outstanding violations, the contractor must submit to the City a copy of the violation for the City's action.

SECTION 01070 - ABBREVIATIONS AND SYMBOLS

A. WORD OMISSIONS

Omissions in the sections of the Specifications following such words as "the Contractor shall," "shall be," "shall consist of," "the" etc., are intentional. Such words and phrases shall be applied where a colon occurs or by inference. Wherever instructions are given in the Specifications, they are directed to the Contractor. Where clarity of intent requires it, the long form is used.

B. DEFINITIONS

Unless otherwise specified:

- 1. The term "Approved" or words of similar import, shall mean approved in writing by:
 - a. Any governmental agency having jurisdiction and
 - b. The City or its Authorized Representative.
- 2. The term **"Equal"** or **"Approved Equal"** shall mean equal in the opinion of the City or its Authorized Representative.
- 3. The term "Adequate" or "Sufficient" shall mean adequate or sufficient in the opinion of the City or its Authorized Representative.
- 4. Wherever the word "provide" is used in the Contract Documents, it shall mean the

- furnishing of all labor, materials, appliances, equipment and services necessary for the fabrication and installation of articles, assemblies and processes required for completion of that work.
- 5. Wherever the word "furnish" is used in the Contract Documents, it shall mean procure, supply and deliver said article required for the completion of that portion of the work.
- 6. Wherever the word **"install"** is used in the Contract Documents, it shall mean to build-in, set or place said article into assembly.
- 7. Wherever the word "**remove**" is used in the Contract Documents, it shall mean to extract in an orderly manner an article or assembly and to dispose of said item in an approved manner off site.
- 8. Wherever the words "City" or "City Representative" or "Authority" are used in the Contract Documents, they shall mean the City Listed on Cover of this Manual.
- 9. Wherever the words "Clerk of the Works" are used in the Contract Documents, they shall mean Bucchianeri Management Services, LLC.

SECTION 01200 - PROJECT MEETINGS

A. PRE-CONSTRUCTION MEETING

1. The Contractor shall attend a job-site meeting with Bucchianeri Management Services, LLC herein referred to and acting as the Owner's Representative/Clerk of the Works, Program Manager prior to commencing any work.

B. JOB MEETINGS

1. Scheduled job meeting shall be held at the job site between City representatives, Clerk of the Works and the Contractor. Attendance by the Contractor is mandatory. The Clerk of the Works shall fix the time for the meeting in consultation with the Contractor. Failure to attend job meetings without prior approval by the Clerk of the Works will result in a \$300.00 penalty to the Contractor per meeting missed.

SECTION 01230 - ALTERNATES

A. REQUIREMENETS

- 1. Submit Alternates with full description of the proposed alternate and the affect on adjacent or related components.
- Alternates quoted on Bid Forms will be reviewed and accepted or rejected at the Owner's option. Accepted alternates will be identified in the Owner-Contractor Agreement.
- 3. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

B. SELECTION AND AWARD OR ALTERNATES

- 1. Indicate variation of Bid Price for Alternates described below and list where provided for Bid Form or any supplement to it, which requests a difference in Contract Price by adding to or deducting from the base bid price.
- 2. Bids will be evaluated on base bid price plus any alternates added to the base bid by the City. Determination of the low bidder will be based on the cost of the base bid as adjusted for the selected alternates.

C. SCHEDULE OF ALTERNATES

This section not used.

SECTION 01300 - SUBMISSIONS, GENERAL ALL SUBMISSIONS

- 1. All submissions and transmittals shall contain the contract title, project name, date and reference numbers.
- 2. Submissions shall be checked by the Contractor for conformance to the Contract requirements and shall bear his stamp of approval as evidence that they have been checked by him. Submissions not bearing the aforementioned stamp will be returned to the Contractor without checking. Contract Drawings submitted as shop drawings will not be accepted.
- 3. Unless specifically noted otherwise, submit all shop drawings, samples and product data from each specification section at the same time.
- 4. Shop drawings, product data, etc., shall be submitted in paper form. Submission by "Fax", or Facsimile or otherwise electronically transmitted shall not be accepted. Original color copies are required if needed to evaluate the submittal properly.
- 5. Deviations from Contract Documents shall be clearly marked in a conspicuous manner, indicating component and system variations, additions and deletions, revised equipment locations, construction detail variations, substitution and similar changes or deviations. Include a written description of the reason for the deviation. Indicate, headroom heights, ceiling heights, clearances, and other dimensions affected by proposed deviations. All variations from the Contract Documents which are not brought to the attention of the Clerk of the Works or consultants in this manner shall be the sole responsibility of the Contractor even though such submittal has been accepted.
- 6. Acceptance of a separate item shall not be interpreted as acceptance of an assembly in which the item functions. The right is reserved by the Clerk of the Works to require submission of detail, shop erection or setting drawings and of any schedules for any part of the work, whether or not specifically mentioned in Specification section, where substitutions or modifications are proposed by the Contractor or where such information is essential to the proper assembly, coordination or execution of the Work under the Contract.
- 7. Contractor's Responsibility: The Clerk of the Works' review and acceptance shall not relieve the Contractor from responsibility for error in shop drawings or for proper coordination and assembly of materials and equipment with other work;

nor from the responsibility of furnishing materials and labor not indicated on the shop drawings, but required by the Contract Documents for completion of the Work.

8. Equivalent Quality of Materials: All materials and equipment which are designated in the Specifications by a number or trade name are designated for the purpose of describing the article and fixing the standard of the quality and finish. Materials and equipment which are, in the opinion of the Clerk of the Works, the equivalent to that specified will be accepted.

9. SUBSTITUTIONS:

- a) For all required submissions, if the Contractor intends to provide the exact item set forth in the specifications (Same manufacturer, model, grade, color, etc.), a certification of such intention may be submitted in lieu of the required Product Data or Sample. Such certification shall be in the form of an 8 ½" x 11" page, bearing clearly the Submission Number, and the words "As Specified". Where several acceptable manufacturer's/Models are specified, indicate which is to be provided. All such certifications are to be made on the Contractor's letterhead, and signed by a duly authorized officer of the Contractor indicating that the item or items have been reviewed by the Contractor for size and function, and that the item will not conflict or impair the completion of the renovations as intended on the drawings or specifications.
- b) The submission of any material, or article, as the equal of the materials or articles set forth in the specifications as a standard shall be accompanied by illustrations, drawings, descriptions, catalogs, records of tests, samples and any other information for both the specified item and the potential substitute item essential for judging the quality, and the materials, finish and durability of that specified as standard, as well as information indicating satisfactory use under similar operating conditions.

B. PRODUCT DATA & SAMPLES REQUIREMENTS

- 1. Each submission shall contain a list of all items proposed to be used, giving the manufacturer's name, trade name, catalogue number or other positive means of identification for each item; and for those items required by the specifications to comply with referenced standards (ASTM., FEDERAL SPECS, ANSI., etc.), certifications of such compliance shall be submitted. Each list shall be accompanied with manufacturer's brochure or literature describing each item. Corresponding items shall be the product of one manufacturer. Catalog cuts and manufacturer brochures submitted with more than one item shown shall clearly identify the item, model number and any other specific information required for review. Submissions not conforming to this requirement will be returned to the Contractor without checking.
- 2. Included in submittals requiring manufacturers' literature, provide complete installation instructions for specified product and any associated miscellaneous material required to complete installation.
- 3. Where physical samples are required, two (2) samples shall be submitted for each

item.

- 4. The term "w/certification" refers to the submittal of any and all certified mill or laboratory test reports indicating that the material submitted complies with the requirements specified and is intended generally for the applications shown.
- 5. The term "w/color chart" refers to the submittal of a manufacturer's full assortment of colors available for the specified product. Submittals shall be in color (black and white copies are not acceptable).
- 6. Except as otherwise specifically provided in the Contract Documents, the Clerk of the Works reserves the right to reject all materials, equipment or articles proposed to be furnished by the Contractor, including but not limited to those with which the Clerk of the Works has had no prior experience, unless the Contractor is able to prove to the satisfaction of the Clerk of the Works that such materials, equipment or articles have been in general use and given satisfactory performance for a minimum of one year. The Contractor shall furnish the Clerk of the Works with a list of locations where such materials, equipment or articles have been used, and the Clerk of the Works shall conduct such investigation as will, in its sole judgment, satisfy itself as to the fitness of the materials, equipment or articles for the work intended.

C. SHOP DRAWING REQUIREMENTS

- 1. The shop drawing(s) shall show in detail all fabrication and installation methods used, including sizes, dimensions, sections, gauges, connections and anchorages.
- 2. No work shall be fabricated, or materials delivered to the site, until final approval of all shop drawing(s) and other required submissions for that work has been obtained. Final approved copies of all shop drawing(s) must be completed without added corrections, notes or comments, in pencil or ink on the white prints or blueprints. At the time of submission, the Contractor shall call to the attention of the Clerk of the Works or the City, in writing, to any deviations from the Contract Documents contained on the Shop Drawing(s). The approval of the Drawing(s) containing deviations not specifically brought to the attention of the Clerk of the Works or the City, or containing errors or omissions of any sort shall not relieve the Contractor of the responsibility for executing the work in accordance with the Contract Documents.
- 3. Base all shop drawing(s) upon field verified conditions and dimensions. Check and coordinate with other affected work before submission to the Clerk of the Works. Unless specifically noted otherwise it will be assumed that all shop drawing(s) information has been checked by the Contractor prior to submission.
- 4. Illustrate the installation, components, anchorage fasteners, finishes and relationship to adjoining work on shop drawing(s). Include on each sheet information as to vendor's name, drawing(s) number, date drawn, revision number and revision date. All shop drawing(s) shall be of standard size.

D. DELIVERY

Contractor shall be responsible for the delivery and pick up of all submissions to the Clerk of the Works at the Marlborough Community Development Office.

SECTION 01310 - SUBMISSIONS

- 1. Detailed submittal requirements are described in each specification section.
- 2. All color submittals are to be actual samples of actual material. No color charts are to be submitted for approval.
- 3. 12"x12" samples of each material used in the renovations are to be submitted with manufacturers' literature for approval. Four copies of each submittal are to be sent to the Clerk of the Works. Clerk of the Works will distribute to project team for review and approval, then return to GC and owner (as necessary).
- 4. The items listed do not limit the Contractor's responsibility from submitting shop drawings for all equipment, accessories and operations that are to be provided under this contract. There will be no adjustment to the contract price to compensate the Contractor for submissions requested by the City which are not specifically listed.
- 5. Within 10 days after receipt of the Letter of Award and the Contract for Construction, Contractor shall record the proposed submission date for each item. The completed proposed submission schedule is to be forwarded to the Clerk of the Works for review, and is then to be presented at City's pre-construction conference (kick-off meeting) for approval.
- 6. Within 10 days after receipt of letter of Award of the Contract for Construction the contractor shall submit the Schedule of Values for review and approval.

SECTION 01390 - SAMPLE INSTALLATION

- 1. After approval of submissions, where requested, each Contractor shall install a sample of the work. The sample shall be of a portion and extent of the work approved by the Clerk of the Works.
- 2. Each Contractor shall notify the City Representative forty eight (48) hours prior to commencing the sample installation.
- 3. No work on sample installation shall be performed unless the City Representative has given permission.
- 4. After the installation has been inspected and written approval has been received from the Clerk of the works & City all subsequent installation shall conform there within every material aspect.

SECTION 01400 - QUALITY CONTROL SERVICES

- A. The City shall perform controlled inspections and tests specified with the exception that the contractor will be responsible for paying for and scheduling all fire system tests, water sanitation tests, water pressure tests, etc for all aspects of the renovations.
- B. Quality control services performed by the City, Governing Authorities and/or the Contractors, include controlled inspections, tests, and related actions including reports. They do not include contract enforcement activities performed by the Clerk of the Works.
- C. Controlled inspections and testing services are required to verify compliance with requirements specified or indicated. These services do not relieve the Contractor of responsibility for compliance with Contract Document requirements.

- D. Re-Testing: Contractor shall pay for re-testing where results of required controlled inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Documents.
- E. Associated Services: Notify field supervisor sufficiently in advance of operations to permit assignment of personnel. Auxiliary services required, include but are not limited to:
 - 1. Providing access to the Work and furnishing incidental labor and facilities necessary to facilitate controlled inspections and tests.
 - 2. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
 - 3. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
 - 4. Providing the independent testing agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
 - 5. Security and protection of samples and test equipment at the Project Site.

SECTION 01500 - FIRE PROTECTION

- 1. Contractor shall provide and maintain adequate fire protection devices, ready for instant use, distributed around the Project.
- 2. Contractor shall make arrangements for periodic inspection by local fire protection authorities and insurance underwriters' inspections. Cooperate with said authorities and promptly carry out their recommendations.
- 3. All Contractors shall observe and enforce, throughout the entire construction period, standards of fire protection including the following:
 - i. Combustible refuse shall be removed from the construction area daily.
 - ii. No oils, gasoline, or other volatile liquids shall be kept inside the building.
 - iii. No open fires shall be allowed within the building.
 - iv. All other similar necessary precautions shall be taken to reduce fire hazards in all areas of the site.

SECTION 01510 TEMPORARY FACILITIES

TEMPORARY SERVICES

A. All temporary services required by the Contractor for General Construction before the Notice to Proceed is issued to the Electrical and Plumbing Contractors shall be provided by the Contractor for General Construction at his own expense.

B. TEMPORARY LIGHT & POWER

1. The City will allow the existing building electrical service to be used for temporary light and power, within the limitations of the existing services. The Electrical Contractor shall furnish and install all temporary lighting including Exterior Security Lighting of the site (see section 01540 "Security") and make all electrical

connections as required. The Electrical Contractor shall also make all temporary electrical connections from existing services required for making temporary power available to other trades as required and as approved by the City.

- **2. Removal.** The temporary lighting system shall be removed by the Contractor for Electric Work when authorized and directed by the Authority Representative.
- **3. Relocation or Extension.** Any Contractor requiring the relocation or extension of the original temporary lighting system shall bear the cost thereof. The Contractor for General Construction shall, at his own cost, extend the original temporary lighting system so as to furnish temporary light for exterior wall construction in winter weather.
- **4.** Temporary Lighting System Not to be Used for Power Purposes. The temporary electric lighting system shall not be used for power purposes excepting that light hand tools may be operated therefrom.
- 5. Temporary Power. For power requirements not described above, i.e. power for heavy duty equipment, electric welding, compressors, etc., each Contractor shall at his own expense furnish, install, and maintain all power wiring and all equipment necessary to supply power for his Work, and upon completion of his Work, shall remove any temporary power lines installed by him. Any Contractor requiring electric service that exceeds the limitations of the available existing service shall, at his own expense, provide such power as approved by the City.

C. TEMPORARY TOILETS

- 1. The General Contractor shall furnish and maintain a sufficient number of portable toilets for the duration of the project.
- 2. The General Contractor shall maintain the toilet facilities in a clean and sanitary manner. The Contractor shall not cause any sanitary nuisances to be committed by his employees in or about the work, and shall enforce all sanitary regulations of the City and State health authorities.
- 3. Site placement to be proposed on site layout and staging drawings submitted for approval at kick off meeting.
- D. TEMPORARY WATER SUPPLY Section not used
- E. TEMPORARY HEAT Section not used

The Contractor has the option of arranging with Owner for suitable space within the existing building to accommodate the requirements listed in paragraph 1 above.

SECTION 01520 - CONSTRUCTION AIDS

- A. This section not used
- B. DEBRIS REMOVAL, MATERIALS DELIVERY
 - 1. The General Contractor shall be responsible for removal and legal disposal of construction debris.
 - 2. Each Contractor shall be responsible for cleaning up his work area, removal from the site of all debris, including surplus materials and depositing debris in the

containers provided by the General Contractor at the completion of each shift of work.

- 3. Debris resulting from construction activity will not be permitted to drop free from openings but shall be removed by the use of material hoist, or (closed, dust-tight) rubbish chutes or other method approved by the City. Hoists and chutes shall be so protected as to prevent damage, staining or marring of any permanent work. Rubbish, dirt and other dust producing materials shall be wetted down to minimize air borne particles.
- 4. Opening of the exterior wall is prohibited, without proper protection of the openings, in a manner approved by the City.
- 5. All materials shall be delivered by materials hoist, or other method approved by the City.

C. MAINTENANCE OF THE SITE

- 1. The General Contractor shall provide all necessary safety equipment, materials and personnel, to protect the public walks, entrances to the buildings, grounds within the work areas of this Contract in order that pedestrians, automobiles and the public be protected at all times. He shall post signs for safety as required by code.
- 2. Each Contractor shall adequately enclose and protect areas against the weather where the installation is incomplete at the end of the working day, and shall be responsible for any damage or inconvenience due to his failure to do so. Such protection shall be done to the complete satisfaction of the City Representative.
- 3. Each Contractor shall properly and completely protect all apparatus included in this Contract against dirt and damage. Each Contractor shall be held fully responsible for all damage to apparatus, regardless of whether provided by him or belonging to the City, until final acceptance. Any equipment furnished under the Contract and any property of the City damaged or destroyed by any Contractor or his employees shall be restored to its original condition or replaced without additional cost to the City.
- D. This section not used.

SECTION 01540 - SECURITY

A. SITE SECURITY

The Contractor shall be responsible to provide suitable renovation area protection to prevent unauthorized entry onto the renovation area and shall be responsible for any loss or damage for the duration of the Contract until Final Acceptance by the City.

SECTION 01600 - MATERIALS AND EQUIPMENT

- A. All equipment furnished and installed under the contract shall be new and of the latest model or design.
- B. All manufactured materials shall be delivered to the Project site in their original packages and containers, bearing the name of the Manufacturer and other identifying information. Damaged or deteriorated materials shall not be used nor shall they be stored on the premises on the site.

- C. All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer unless otherwise specified.
- D. Only the latest editions or revisions of reference standards, codes, and specifications in force at the date of bid opening shall be applicable unless otherwise specifically noted. These shall be supplemented by, and superseded if in conflict with, the Commonwealth of Massachusetts. Building Code and applicable requirements of the code shall be followed as if especially noted herein unless otherwise directed by City.
- E. Materials shall be new, best qualify, free from defects and shall conform to the specification list for that item.
- F. Material or equipment designated by specification number shall mean the latest revision of the Specification.
- G. Where materials are specified to comply with a reference standard, it is not intended to relieve the contractor from the responsibility of supplying material that complies with applicable municipal requirements.
- H. All materials, methods, equipment and labor practices shall be fully approvable to O.S.H.A.

SECTION 01620 – This section not used

SECTION 01660 - TESTS

A. The Contractor shall be responsible for conducting all necessary tests required by the rules, regulations and laws of the Commonwealth of Massachusetts.

SECTION 01700 - CONTRACT CLOSEOUT

A. SUMMARY

- 1. This Section includes administrative and procedural requirements for contract closeout including, but not limited to, the following:
 - a. Inspection procedures.
 - b. Project record document submittal.
 - c. Operation and maintenance manual submittal.
 - d. Submittal of warranties.
 - e. Final cleaning.
- 2. Closeout requirements for specific construction activities are included in the appropriate Section in Divisions 2 through 16.
- 3. Related Sections: The following Sections contain requirements that relate to these Sections:
 - a. Requirements for final survey are specified in Division 1 Section 01060 "Regulatory Requirements."
 - b. Requirements for final cleaning are specified in Division 1 Section 01710 "Cleaning".

c. Requirements for Record Drawings are specified in Division 1 Section 01720 "Project Record Documents."

B. SUBSTANTIAL COMPLETION

- 1. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following. List exceptions in the request.
 - a. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete.
 - Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - ii. If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the work is not complete.
 - b. Advise the City of pending insurance changeover requirements.
 - c. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications, and similar documents.
 - d. Obtain and submit releases enabling the City unrestricted use of the work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - e. Submit record drawings, maintenance manuals, final project photographs, damage or settlement surveys, property surveys, and similar final record information.
 - f. Deliver tools, spare parts, extra stock, and similar items.
 - g. Make final changeover of permanent locks and transmit keys to the City's Representative. Advise the City's Representative and personnel of changeover in security provisions.
 - h. Complete startup testing systems and instruction of the Owner's operation and maintenance personnel. Discontinue and remove temporary facilities from the site, along with mockups, construction tools, and similar elements.
 - i. Complete final cleanup requirements, including touchup painting.
 - j. Touch up and otherwise repair and restore marred, exposed finishes.
- 2. Inspection Procedures: On receipt of request for inspection, the Clerk of the Works will either proceed with inspection or advise the Contractor of unfilled requirements. The Clerk of the Works will prepare the Certificate of Substantial Completion following inspection or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.
- a. The Clerk of the Works will repeat inspection when requested to assure that the Work is substantially complete.
- b. Results of the complete inspection will form the basis of requirements for final

acceptance.

C. FINAL ACCEPTANCE

- Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following. List exceptions in the request.
 - Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include insurance certificates for products and completed operations where required.
 - Submit an updated final statement, accounting for final changes to the Contract Sum.
 - c. Submit a certified copy of the City's final inspection list of items to be completed or corrected, endorsed and dated by the City. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance and shall be endorsed and dated by the City.
 - d. This section not used
 - e. This section not used
 - f. Submit a final liquidated damages settlement statement, if required.
 - g. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
- 2. Re-inspection Procedure: The Clerk of the Works will re-inspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except for items whose completion is delayed under circumstances acceptable to the City.
 - a. Upon completion of re-inspection, the City will prepare a certificate of final acceptance. If the work is incomplete, the City will advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 - b. If necessary, re-inspection will be repeated.

D. RECORD DOCUMENT SUBMITTALS

- 1. Record Drawings: Refer to Division 1 Section 01720 "Project Record Documents" for requirements.
- 2. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record keeping and submittals in connection with actual performance of the Work immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order. Identify miscellaneous records properly and bind or file, ready for continued use and reference. Submit for the City's records.
- 3. Operations and Maintenance Manuals.
 - a. Each Contractor shall submit three copies of an Operating and Maintenance Manual

for all operating equipment. Manuals shall consist of plastic covered three ring loose leaf binders with project name lettered on the front. If possible, sheets shall be 8 1/2" x 11". When larger sheets must be used, they shall be neatly folded to 8 1 /2" x 11" and inserted as a foldout. Obtain the approval of the City inspector prior to submission. Each manual shall include:

- i. Name, address, and trade of all Contractors, manufacturers, and suppliers who participated in the construction or furnished materials and equipment.
- ii. Complete maintenance instructions, name, address, telephone number of installing Subcontractor and manufacturer's local representative for each piece of operative equipment and finish material.
- iii. Catalog data bearing the Clerk of the Works' action stamp on all product data submittals. Manufacturer's advertising or promotional literature will not be acceptable.
- iv. Manufacturer's name, model number, services manual, spare parts lists, and descriptive literature for all components.
- v. Preventive maintenance instructions and schedules for all major equipment.
- vi. Instruction for starting and operating the actual system as installed.
- vii. Field test reports.
- viii. Copies of all guarantees and warranties issued by any manufacturer or subcontractor for material or equipment installed as part of Project Work.

E. FLOW AND WIRING DIAGRAMS

1. Provide one-line, color-coded flow and wiring diagrams. Provide to the City Representative.

F. PERMITS, GUARANTEES AND CERTIFICATES

1. Deliver originals of all permits obtained by the Contractor, including the Certificate of Completed Inspection and originals of all Contractors' guarantees and warranties.

G. OWNER'S ORIENTATION CHECKLIST

1. Each Prime Contractor shall submit a list of all operating equipment, which will serve as a checklist for the demonstration and training of the City's personnel as describe in Section "H" below, "Closeout Procedures".

H. CLOSEOUT PROCEDURES

- 1. Operation and Maintenance Instructions: Arrange for each Installer of equipment that requires regular maintenance to meet with the City's personnel to provide instruction in proper operation and maintenance. Provide instruction by manufacturer's representatives if installers are not experienced in operation and maintenance procedures. Include a detailed review of the following items:
 - a. Maintenance manuals.
 - b. Record documents.

- c. Spare parts and materials.
- d. Tools.
- e. Lubricants.
- f. Fuels.
- g. Identification systems.
- h. Control sequences.
- i. Hazards.
- j. Cleaning.
- k. Warranties and bonds.
- 1. Maintenance agreements and similar continuing commitments.
- 2. As part of instruction for operating equipment, demonstrate the following procedures:
 - a. Startup.
 - b. Shutdown.
 - c. Emergency operations.
 - d. Noise and vibration adjustments.
 - e. Safety procedures.
 - f. Economy and efficiency adjustments.
 - g. Effective energy utilization.

I. FINAL CLEANING

1. General: Complete final cleaning as specified in Division I Section 01710 "Cleaning."

SECTION 01710 - CLEANING

A. GENERAL

- 1. Upon completion of the work and/or at the end of each working day, the General Contractor shall assume ownership of all debris resulting from the work, remove it from the premises and legally dispose of it, unless otherwise specified.
- 2. Upon completion of the work, or when directed by the Inspector, the General Contractor shall thoroughly clean all surfaces of all rooms and spaces, including all exterior areas, which have become soiled as a result of the work of the Contract.
- 3. As the work in various areas is completed, said areas shall be broom cleaned and all rubbish, debris, excess materials and tools and scaffolding shall be removed.
- 4. The General Contractor shall clean all paint pots, oils, plaster and stains from floors, walls, woodwork, glass, hardware metal work and all similar items upon completion. Plaster dust shall be removed daily by commercial type vacuum cleaners.
- 5. Drop cloths and other protective devices shall be kept clean at all times.
- 6. Leave premises broom clean at end of each day. Keep dirt and debris to a minimum in the construction repair areas. Wet down dust with water spray where necessary.

B. FINAL CLEANING

- 1. The General Contractor shall be responsible for final cleaning upon completion of all work. The premises shall be cleaned to a neat and perfect condition satisfactory to the City. This work shall include washing of all windows and mopping of all floors
- 2. Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to the condition expected in a normal, residential building, cleaning and maintenance program. Comply with manufacturer's instructions when finish materials require special treatment.
 - a. Remove labels that are not permanent labels.
 - b. Clean transparent materials, including mirrors and glasses in doors and windows. Remove glazing compound and other substances that are noticeable vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials.
 - c. Clean exposed exterior and interior hard-surfaced finishes, equipment, cabinets, shelving, etc., to a dust-free condition, free of joint compound, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition.
 - d. Broom clean concrete floors. Vacuum carpeted surfaces. Mechanically clean and polish vinyl composition tile floors. Clean ceramic tile to remove all dirt, grime and grout material left from installation.
 - e. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication and other substances. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
 - f. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances. Sweep paved areas broom clean. Remove stains, spills and other foreign deposits.
 - g. Compliance: Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on the Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from the site and dispose of lawfully.
- 3. Removal of Protection: Remove temporary protection and facilities installed for protection of the Work during construction and dispose of legally.
- 4. Extra Stock: Deliver attic or extra stock and materials as specified in original cartons or containers to location(s) directed by the City Representative.

SECTION 01720 - This section not used

SECTION 01740 - GUARANTEES AND WARRANTIES

A. GUARANTEES

- 1. The Contractor shall make any required or directed adjustments, repairs and replacement made necessary because of faulty or defective material or workmanship upon 48 hours notice by the City or Clerk of the Works during construction and by the City for a period set forth in the individual specifications for each trade but not less than one (1) year after completion of the entire job or until all permits and approvals have been received, whichever is later. In the event that any portion of the site is taken over by the City prior to Final Acceptance, the guarantees for this portion only shall commence from the time of takeover.
- 2. Guarantee the work to be free of all defects. Replace or repair defective materials or workmanship, and all damage to the work of other trades resulting from the replacement or repairs during guarantee periods.
- 3. Duration of guarantee periods following the date of acceptance of the building shall be for one year, unless otherwise indicated.
- 4. The acceptance shall be the date of final payment of the work or the date of a formal notice of acceptance, whichever is earlier.

B. WARRANTIES

- Provide a special project warranty, signed by the Contractor, Installer, and Manufacturer, agreeing to replace, and/or restore defective materials and workmanship of mechanical systems during the warranty period. "Defective" includes, but is not limited to, operation or system failures, performance below required levels, unsafe conditions, finishes, need for excessive maintenance, abnormal noise or vibration and similar, unusual, unexpected or unsatisfactory conditions.
- 2. The warranty period is twelve (12) months, starting on the date of final acceptance of the building by the City.

END OF SECTION - 01000